ABSTRACT OF THE DISCLOSURE

METHOD AND SYSTEM FOR AGGREGATING INTERFACE ADDRESSES

A system for effectively reducing address resolution of a packet on a network by representing multiple addresses on a node of the network by a single maskaddress. An aggregation utility is utilized to aggregate the multiple addresses from an address space (i.e., a number of addresses having a common initial bits) of sequential addresses. A pre-selected aggregation percent, representing the percentage of actual addresses from the space which is present on the node, is utilized in the evaluation of the maskaddress. The maskaddress comprises of two variables. The first variable represents the size of the space and the common initial bits. The second variable provides information on the number of relevant bits to include in the maskaddress and the length of the space to point out the actual addresses, which are present in the space. A negative address utility is utilized to indicate which addresses from within the address pace are not hosted on the node. Finally, a comparison utility compares the destination address of network packets with the maskaddress to determine if the packet is addressed to one of the addresses on the node.